The Arrival of Back Vowel Fronting in New York City English

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1. Introduction

Back Vowel Fronting (BVF) has been described in several N. Am dialects, in some cases affecting only GOOSE and GOAT (Labov 1994, Labov et al. 2005), and in others, FOOT as well (Fridland & Bartlett 2006, Eckert 2008, Podesva et al. 2015). New York City English (NYCE) has generally been described as conservative with respect to BVF (Labov et al. 2005), however, Newman (2014) reports some fronting of post-coronal /u/ (TOO) among Whites and Asians. In addition, Wong (2014) reports some fronting of HOOP (non-post-coronal, non-pre-lateral /u/) among younger Chinese-Americans. There are no published large-sample production studies of BVF in NYCE.

Goals

1. We examine age and ethnicity effects on back vowels based on conversation data from 97 speakers recorded through the CoNYCE project (Tortora et al., in progress).
2. We compare patterns of BVF with distribution of short-a change and THOUGHT-lowering (Becker & Wong 2010, Becker 2010).

2. Method

Subjects: Subjects were 58 self-identified women, 39 men, with year of birth ranging from 1906 to 2001 (M=1975), and residents of five boroughs, Nassau or Suffolk from age nine. 14 were Asian, 18 Black, 27 Latinx, 38 White. Six samples are oral histories recorded through Bronx Oral History Archive. 91 samples are sociolinguistic interviews by student researchers gathered 2015-2017.

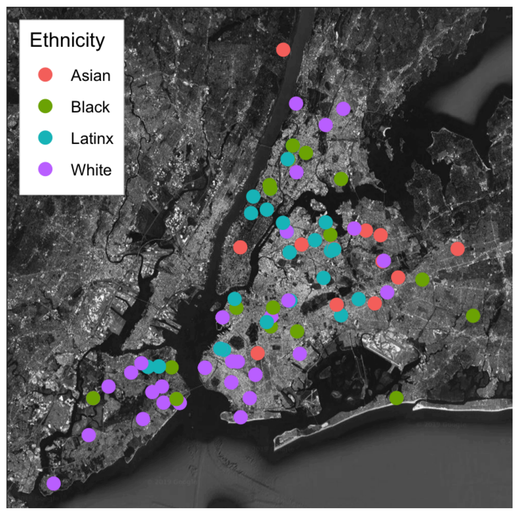
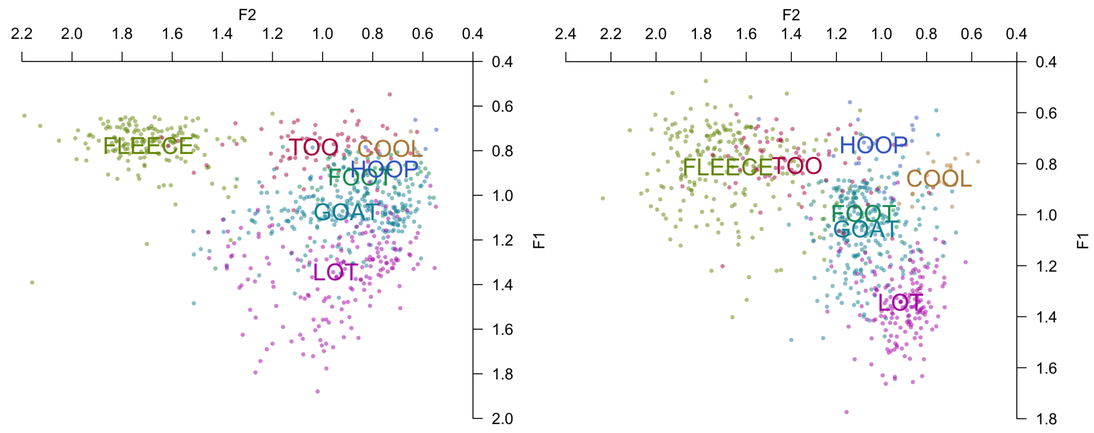


Figure 1: Subjects by home neighborhood and ethnicity.

Materials & procedure: 34,035 vowels were measured at 35% of duration using FAVE-Extract (Rosenfelder et al. 2014) and Prosodylab-Aligner (Gorman et al. 2011), via DARLA (Reddy & Stanford 2015). We compared acoustic data with subjects' responses to interview questions that elicit metalinguistic, metapragmatic, and language ideologies pertaining to local ways of talking.

Funding: NSF grants BCS-1630274, BCS-1630377, BCS-1630286.

3. Results



(a) John Stugots, White man, b. 1959.

(b) Sarah Rodgers, Chinese-Am. woman, b. 1999.

Figure 2: F1∼F2 plots illustrating 2 BVF patterns. Panel (a) illustrates the conservative system with marginal fronting only for TOO. Panel (b) illustrates the innovative system with fronting for TOO, HOOP, GOAT and FOOT.

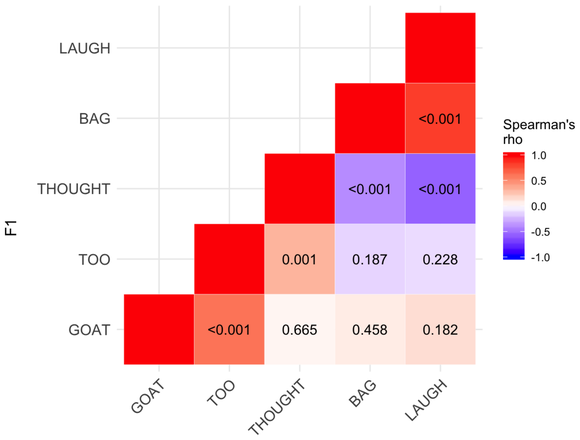


Figure 3: A Spearman's ρ matrix of by-subject random intercepts for five different vocalic changes. BVF correlates weakly across speakers with use of innovative variants for THOUGHT and short-a.

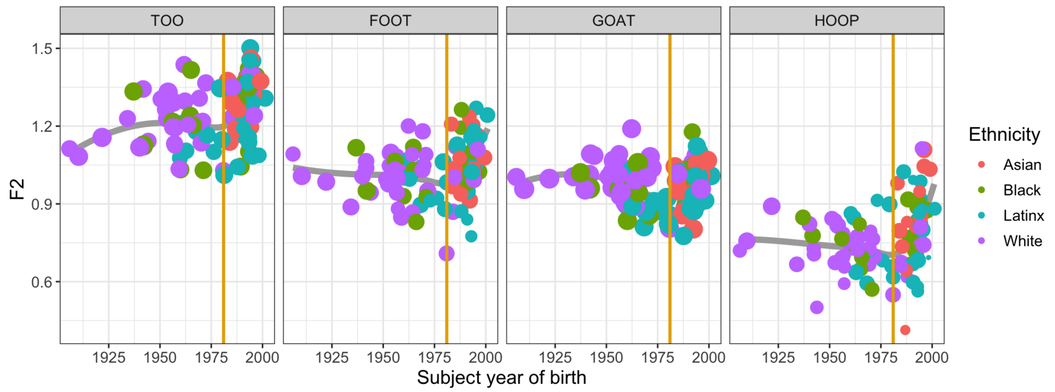


Figure 4: By-subject random intercepts by subject year of birth and lexical set. (Model tempate: (F2∼ Year of Birth+Duration+(1 | Root)+(1 | Subject).) Yellow line shows optimum break point for the slope of year of birth at 1981.

Maria Garcia: *I think I have a mix of New Yorker with a like a Hispanic accent.*
Selena Cortazar: *I wouldn't know how to like identify a New Yorker accent because I think New Yorkers don't have an accent. . . . Yeah, I have like a Hispanic accent.*
Sophia Omelas: *[In] middle school . . . the popular thing was. . . California based shows like Laguna Beach . . . The Hills mm so it was a very like Valley Girl kind of accent. I didn't speak that way at all . . . for some reason that brushed off on me and so I started trying to imitate like what you know quote-unquote the White girls sounded.*
Bruno E: *[S]o many people we have here like from different backgrounds. Like, I hate when people say what do New Yorkers sound like? It's like you, you sound like one. I sound like one. Everyone's different. We're diversity.*

Figure 5: Young Latinx meta-linguistic comments about NYCE.

4. Conclusion

Four main findings

1. ***Age effects.*** The analysis reveals age effects on F2 for TOO, HOOP, GOAT and FOOT lexical sets starting with speakers born > 1981. The analysis reveals moderate to strong cross-speaker correlations in mean F2 values across these four lexical sets suggesting a single process of change affecting the four lexical sets.
2. ***No ethnicity/class effects.*** Unlike reports on BVF elsewhere, the analysis revealed no effects of gender, class or ethnicity (Godinez & Maddieson 1985, Fridland & Bartlett 2006, Hall-Lew 2009).
3. ***Weak cross-speaker correlation with low vowel changes.*** Our results align with results suggesting that two well-described low vowel changes (short-a reorganization and THOUGHT-lowering are similarly distributed across speakers (Labov 1966, Becker 2010, Newlin-Łukowicz 2016). BVF, however, correlates weakly across speakers with these features. The present results, moreover, suggest that BVF began more recently than the low vowel changes.
4. ***Emergent stylistic meaning of BVF.*** These facts suggest BVF may index a different set of social meanings than the low-vowel changes, which are more prominent in local metalinguistic discourse (Cutler 2018). The lack of gender, class or ethnicity effects in the analysis of BVF fronting points to the importance of looking for ways in which identity emerges in speakers' responses to metalinguistic and metapragmatic questions (Bucholtz & Hall 2005). BVF seems to be below speakers' level of consciousness, yet it likely has some kind of social meaning as part of a linguistic style (Eckert 2018). Testing what internal variants (e.g. high rising terminals, low-back merger) and/or external factors (e.g. musical taste, musical taste, cultural affiliation, aspirational identities, etc.) might be associated with BVF can help uncover what social meaning(s) it has for speakers who use it.